

Notice of Allowability

Application No.

09/881,698

Examiner

Steven D. Maki

Applicant(s)

TOZAWA ET AL.

Art Unit

1733

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 6-24-04.
2. ☒ The allowed claim(s) is/are 1, 5 and 6.
3. ☒ The drawings filed on 18 June 2001 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

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Examiner's Amendment

1) An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

In claim 1:

line 16 before "from 0 to 2 mm" change "arrange" to --a range--

Change title to:

--Pneumatic tire including protrusion dividing groove space of main groove
having groove width narrowed during inflation--

With respect to claim 1, the change of "arrange" to --a range-- so that claim 1 recites "is set in a range from 0 to 2 mm" corrects an obvious typographical error. See MPEP 1302.04.

With respect to the change in the title, see MPEP 606.01.

Reasons for Allowance

2) The following is an examiner's statement of reasons for allowance:

Matsumoto et al (US 6591880 having a filing date between the filing date of this application and the filing date of applicant's foreign priority document) discloses a heavy

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duty tire having main grooves wherein at least two circumferential fine grooves 15, 16 are formed in a circumferential rib 6 defined by two adjoining main circumferential grooves 2, 3. In figure 4, Matsumoto et al shows inclining two of the fine circumferential grooves 15, 16 in opposite directions and offsetting the rib portion 6A radially inwardly. However, Matsumoto et al teaches disposing the rib portion 6A in a circumferential rib 6 defined by two adjoining main circumferential grooves *instead of* a main groove having a groove width narrowed during inflation. Moreover, Matsumoto et al fails to teach dividing the rib portion 6A shown in figure 4 with a slit as claimed.

With respect to Kukimoto and Japan '709 (both already of record), it is emphasized that (1) Kukimoto et al shows respective ones of protrusion sidewalls and groove walls inclining in the same direction but does not show a circumferential slit in the protrusion, (2) Japan '709 shows a circumferential slit in a protrusion but does not show respective ones of the protrusion sidewalls and the both groove walls being oriented parallel and (3) neither Kukimoto et al nor Japan '709 recite main grooves having groove widths which narrow during inflation.

The prior art of record (including Matsumoto et al, the admitted prior art, Kukimoto et al, Montagne, Japan '609 and Japan '709) fails to disclose, teach or suggest a pneumatic tire having main grooves having a groove width narrowed during inflation and inclined groove walls so that the groove width of the main groove becomes wider toward a groove bottom and a protrusion having slanted sidewalls such that respective ones of the pair of protrusion slanted sidewalls and the both groove walls are oriented parallel to each other and "a height difference between said protrusion and said

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tread surface is set in a range from 0 to 2 mm, the height of said protrusion is at least 12 mm and a ratio of the height of said protrusion to a groove depth of the main groove is set at 0.8 or higher" and "said protrusion is divided in the tire width direction by a slit formed into the flat top surface towards the groove bottom and extending circumferentially thereabout to form a first divided protrusion section and a second divided protrusion section in facial contact with the first divided protrusion section at the slit".

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

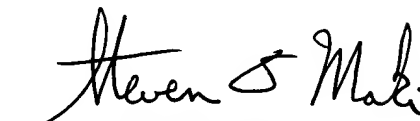
3) Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven D. Maki whose telephone number is (571) 272-1221. The examiner can normally be reached on Mon. - Fri. 7:30 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Blaine Copenheaver can be reached on (571) 272-1156. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Steven D. Maki
July 1, 2004


STEVEN D. MAKI 7-1-04
PRIMARY EXAMINER
~~GROUP 1300~~
Au 1733